

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (withdrawn)

2. (withdrawn)

3. (withdrawn)

4. (withdrawn)

5. (withdrawn)

6. (withdrawn)

7. (withdrawn)

8. (withdrawn)

9. (withdrawn)

10. (withdrawn)

11. (withdrawn)

12. (withdrawn)

13. (withdrawn)

14. (withdrawn)

15. (withdrawn)

16. (withdrawn)

17. (withdrawn)

18. (withdrawn)

19. (withdrawn)

20-31. (cancelled)

32. (previously presented) A method for manufacturing a soft magnetic metal electro-mechanical component comprising the steps of:

winding soft magnetic metal ribbon into a toroid having an inner side surface, an outer side surface, a top, and a bottom;

containing the toroid within a milling assembly, said containing comprising placing an inner ring circumferentially about at least a portion of the inner side surface;

applying an adhesive to the toroid;

curing the adhesive;

milling the toroid into an electro-mechanical component shape; and

thermally processing the electro-mechanical component shape into an electro-mechanical component.

33. (currently amended) The method of claim 32 ~~including the~~ further including the step of: removing the toroid from the milling assembly.

34. (cancelled)

35. (cancelled)

36. (currently amended) The method of claim 32 where the step of containing the toroid within a ~~milling assembly~~ the milling assembly further comprises placing an outer ring circumferentially about at least a portion of the outer side surface.

37. (currently amended) The method of claim 32 where the step of containing the toroid within a ~~milling assembly~~ the milling assembly further comprises placing a hat on at least a portion of the top.

38. (currently amended) The method of claim 32 where the step of containing the toroid within a ~~milling assembly~~ the milling assembly further comprises placing a base on at least a portion of the bottom.

39. (currently amended) The method of claim 32 where the step of containing the toroid within a ~~milling assembly~~ the milling assembly further comprises the steps of:
 placing an outer ring circumferentially about at least a portion of the outer side surface; and
 placing a hat on at least a portion of the top.

40. (original) The method of claim 39 where the inner ring is placed about substantially all of the inner side surface.

41. (original) The method of claim 39 where the outer ring is placed about substantially all of the outer side surface.

42. (original) The method of claim 39 where the hat is placed about substantially all of the top.

43. (original) The method of claim 39 where a milling plate is placed about substantially all of the bottom.

44. (original) The method of claim 39 where the hat and the outer ring are integral.

45. (currently amended) The method of claim 39 where the hat, ~~outer ring and inner ring~~ the outer ring and inner ring are integral.

46. (original) The method of claim 39 including the step of placing a retainer around the outer ring to secure the toroid within the milling assembly.

47. (currently amended) The method of claim 40 ~~including the~~ further including the step of providing milling grooves within the milling assembly.

48. (previously presented) The method of claim 32 where the toroid has a ribbon winding axis, and the step of milling the toroid into a toroid shape consists of milling the toroid primarily in an axis perpendicular to the winding axis.

49. (previously presented) The method of claim 32 where the toroid has a winding axis, and the step of milling the toroid into a toroid shape consists of milling the toroid exclusively in an axis perpendicular to the winding axis.

50. (original) The method of claim 45 where the toroid has a winding axis, and the step of milling the toroid into a toroid shape consists of milling the toroid primarily in an axis perpendicular to the winding axis.

51. (currently amended) The method of claim 45 where the hat and outer ring have slots, and the step of milling the toroid into ~~an electro-mechanical component~~ the electro-mechanical component shape includes milling through the slots.

52. (currently amended) The method of claim 45 where the toroid has a winding axis, and the step of milling the toroid into ~~an electro-mechanical component~~ the electro-mechanical component shape

consists of milling the toroid with the cutting tool rotating exclusively in an axis perpendicular to the winding axis.

53. (currently amended) The method of claim 50 where the where the hat and ~~outer~~ the outer ring have slots, and the step of milling the toroid into ~~an electro-mechanical component~~ the electro-mechanical component shape includes milling through the slots.

54. (withdrawn)

55. (currently amended) A method for manufacturing a soft magnetic metal electro-mechanical component comprising the steps of:

winding soft magnetic metal ribbon about a winding axis into a toroid, the toroid having an inner side, an outer side, a top and a bottom;

placing an inner ring on the inner side;

placing an inner containment hat on the top and ~~inner~~ the inner side;

placing an outer containment hat on the top and ~~outer~~ the outer side;

placing a retainer around the outer containment hat; applying adhesive to the toroid;

curing the adhesive;

milling the toroid into an electromechanical component shape; and

thermally processing the electromechanical component shape into an electro-mechanical component.

56. (previously presented) The method of claim 55 where the inner containment hat has a plurality of inner containment hat slots and the outer containment hat has a plurality of outer containment hat slots, and the step of milling the toroid into a electromechanical component shape comprises milling through the inner containment hat slots and the outer containment hat slots.

57. (previously presented) The method of claim 56 including a step of aligning the inner containment hat slots and the outer containment hat slots.

58. (currently amended) The method of claim 55 where the step of milling the toroid into an electro-mechanical component shape occurs with ~~the cutting~~ cutting tools rotating primarily on an axis perpendicular to the winding axis.

59. (currently amended) The method of claim 55 where the step of milling the toroid into an electro-mechanical component shape occurs with ~~the cutting~~ cutting tools rotating exclusively on an axis perpendicular to the winding axis.

60. (previously presented) The method of claim 32 where the step of applying the adhesive to the toroid comprises an atmospheric soak process.

61. (previously presented) The method of claim 32 where the step of applying adhesive to the toroid includes the steps of:

- providing a vessel containing the adhesive;
- immersing the toroid in the adhesive; and
- evacuating the vessel.

62. (previously presented) The method of claim 32 where the step of curing the adhesive is carried out at a heat treating temperature and the step of thermally processing the electro-mechanical component shape occurs at a thermal processing temperature, and wherein the heat treating temperature is a fraction of the heat processing temperature.

63. (previously presented) The method of claim 62 where the fraction is about 1/2.

64. (previously presented) The method of claim 62 where the fraction is about 3/4.

65. (previously presented) The method of claim 62 where the fraction is about 1/4.

66. (previously presented) A method for manufacturing a soft magnetic metal electro-mechanical component comprising the steps of:

winding soft magnetic metal ribbon into a toroid having an inner side surface, an outer side surface, a top and a bottom;
containing the toroid within a milling assembly, said containing comprising placing an outer ring circumferentially about at least a portion of the outer side surface;
applying an adhesive to the toroid;
curing the adhesive;
milling the toroid into an electro-mechanical component shape; and
thermally processing the electro-mechanical component shape into an electro-mechanical component.

67. (currently amended) The method of claim 66 where the step of containing the toroid within a ~~milling the milling~~ assembly further comprises placing a hat on at least a portion of the top

68. (currently amended) The method of claim 66 where the step of containing the toroid within a ~~milling the milling~~ assembly further comprises placing a base on at least a portion of the bottom

69. (previously presented) The method of claim 66 where the outer ring is placed about substantially all of the outer side surface.

70. (previously presented) The method of claim 67 where the hat is placed about substantially all of the top.

71. (previously presented) The method of claim 66 where a milling plate is placed about substantially all of the bottom.

72. (previously presented) The method of claim 67 where the hat and the outer ring are integral.

73. (withdrawn) A soft magnetic metal electro-mechanical component made from the process of claim 66.